

SEQUENCE LISTING

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<170> PatentIn Ver. 2.1

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<212> DNA

<213> Nicotiana tabacum

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<222> (244)..(1566)

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gatagactct agtggatatt tacaagtatt ggttttttga taaaataggc tgagggtgaga
180

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288

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336

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384

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432

Trp Asn Gly Arg Ile Lys Lys Gly Gly Arg Gln Arg Trp Asn Phe Gly
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Thr Val Gly Leu Met Ser Val Pro Val Met Gly Ile Ala Pro Glu Ser
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1536

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1586

Arg Thr Ser Ser Pro Leu Ala Lys Thr
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50 55 60

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Lys Gly Ser Thr Phe Ser Val Gln Ser Ser Leu Val Ala Ser Pro Ala
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Gly Glu Met Thr Val Ser Ser Glu Lys Lys Val Tyr Asp Val Val Leu
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Lys Gln Ala Ala Leu Val Lys Arg Gln Leu Arg Ser Thr Asp Asp Leu
115 120 125

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Pro Asn Ala Ser His Ile Thr Pro Gln Ala Leu Asp Arg Trp Glu Thr						
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Arg Leu Glu Asp Ile Phe Ser Gly Arg Pro Phe Asp Met Leu Asp Ala						
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 Gly Ser Val Arg Ser Ala Met Val Ala Thr Pro Ala Gly Glu Met Ala
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737

Asp Arg Cys Ser Glu Val Cys Ala Glu Tyr Ala Lys Thr Phe Tyr Xaa
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785

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833

Tyr Val Trp Cys Arg Arg Thr Asp Glu Leu Val Asp Gly Pro Asn Ala
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881

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929

Asp Val Phe Ser Gly Arg Pro Phe Asp Met Leu Asp Ala Ala Leu Ser
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977

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1025

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1121

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Pro	Asp	Ser	Lys	Ala	Thr	Thr	Glu	Ser	Val	Tyr	Asn	Ala	Ala	Leu	Ala
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 Asp Ala Arg Arg Gly Arg Val Tyr Leu Pro Gln Asp Glu Leu Ala Gln
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 Pro Val Trp Ala Ser Leu Leu Leu Tyr Arg Gln Ile Leu Asp Glu Ile
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 Val Phe Arg Gly Pro Arg Leu Ser Asn Arg Phe Val Thr Arg Lys Ser

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422

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470

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566

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115 120 125

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614

Asn His Ile Glu Met Gly Leu His Val Phe Phe Gly Cys Tyr Asn Asn
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662

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758

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195 200 205

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902

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950

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998

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1094

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290 295 300

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1142

Gly Pro Ile Lys Lys Tyr Ile Leu Asp Lys Gly Gly Arg Phe His Met
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1526

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1574

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1622

Tyr Met Pro Leu Leu Asn Asp Glu Ile Ile Lys Arg Val Ser Lys Gln
465 470 475

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1670

Val Leu Ala Leu Phe Pro Ser Ser Gln Gly Leu Glu Val Thr Trp Ser
480 485 490

tca gtt gtg aaa att ggg caa tcc cta tat cgt gaa gga cct ggt aaa
1718

Ser Val Val Lys Ile Gly Gln Ser Leu Tyr Arg Glu Gly Pro Gly Lys
495 500 505 510

gac cca ttc aga cct gat cag aag act cca gtg gaa aat ttc ttt ctt
1766

Asp Pro Phe Arg Pro Asp Gln Lys Thr Pro Val Glu Asn Phe Phe Leu
515 520 525

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Ala Gly Ser Tyr Thr Lys Gln Asp Tyr Ile Asp Ser Met Glu Gly Ala

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1862

Thr Leu Ser Gly Arg Gln Ala Ser Ala Tyr Val Cys Asp Ala Gly Glu
545 550 555

aag ctg gtg gtg ttg cgg aaa aag att gct gct gct gag tca aac gag
1910

Lys Leu Val Val Leu Arg Lys Lys Ile Ala Ala Ala Glu Ser Asn Glu
560 565 570

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1955

Ile Ser Glu Gly Val Ser Val Ser Asp Glu Leu Ser Leu Val
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2075

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35 40 45

Arg Ala Asp Leu Asp Ser Met Val Ser Asp Met Ser Thr Asn Ala Pro
50 55 60

Lys Gly Leu Phe Pro Pro Glu Pro Glu His Tyr Arg Gly Pro Lys Leu
65 70 75 80

Lys Val Ala Ile Ile Gly Ala Gly Leu Ala Gly Met Ser Thr Ala Val
85 90 95

Glu Leu Leu Asp Gln Gly His Glu Val Asp Ile Tyr Glu Ser Arg Pro
100 105 110

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Phe Ile Gly Gly Lys Val Gly Ser Phe Val Asp Arg Arg Gly Asn His
 115 120 125
 Ile Glu Met Gly Leu His Val Phe Phe Gly Cys Tyr Asn Asn Leu Phe
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 Arg Leu Leu Lys Lys Val Gly Ala Glu Lys Asn Leu Leu Val Lys Asp
 145 150 155 160
 His Thr His Thr Phe Val Asn Lys Gly Gly Glu Ile Gly Glu Leu Asp
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 Phe Arg Phe Pro Val Gly Ala Pro Leu His Gly Ile Asn Ala Phe Leu
 180 185 190
 Ser Thr Asn Gln Leu Lys Ile Tyr Asp Lys Ala Arg Asn Ala Val Ala
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 Leu Ala Leu Ser Pro Val Val Arg Ala Leu Val Asp Pro Asp Gly Ala
 210 215 220
 Leu Gln Gln Ile Arg Asp Leu Asp Ser Val Ser Phe Ser Glu Trp Phe
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 Met Ser Lys Gly Gly Thr Arg Ala Ser Ile Gln Arg Met Trp Asp Pro
 245 250 255
 Val Ala Tyr Ala Leu Gly Phe Ile Asp Cys Asp Asn Ile Ser Ala Arg
 260 265 270
 Cys Met Leu Thr Ile Phe Ala Leu Phe Ala Thr Lys Thr Glu Ala Ser
 275 280 285
 Leu Leu Arg Met Leu Lys Gly Ser Pro Asp Val Tyr Leu Ser Gly Pro
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 Ile Lys Lys Tyr Ile Leu Asp Lys Gly Gly Arg Phe His Met Arg Trp
 305 310 315 320
 Gly Cys Arg Gln Val Leu Tyr Glu Thr Ser Ser Asp Gly Ser Met Tyr
 325 330 335
 Val Ser Gly Leu Ala Met Ser Lys Ala Thr Gln Lys Lys Val Val Lys
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 Ala Asp Ala Tyr Val Ala Ala Cys Asp Val Pro Gly Ile Lys Arg Leu
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 Val Pro Gln Lys Trp Arg Glu Leu Glu Phe Phe Asp Asn Ile Tyr Lys
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 Leu Val Gly Val Pro Val Val Thr Val Gln Leu Arg Tyr Asn Gly Trp
 385 390 395 400
 Val Thr Glu Leu Gln Asp Leu Glu Arg Ser Arg Gln Leu Lys Arg Ala
 405 410 415
 Thr Gly Leu Asp Asn Leu Leu Tyr Thr Pro Asp Ala Asp Phe Ser Cys
 420 425 430
 Phe Ala Asp Leu Ala Leu Ala Ser Pro Glu Asp Tyr Tyr Ile Glu Gly

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Gln Gly Ser Leu Leu Gln Cys Val Leu Thr Pro Gly Asp Pro Tyr Met		
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Pro Leu Leu Asn Asp Glu Ile Ile Lys Arg Val Ser Lys Gln Val Leu		
465	470	475
Ala Leu Phe Pro Ser Ser Gln Gly Leu Glu Val Thr Trp Ser Ser Val		
	485	490
Val Lys Ile Gly Gln Ser Leu Tyr Arg Glu Gly Pro Gly Lys Asp Pro		
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Phe Arg Pro Asp Gln Lys Thr Pro Val Glu Asn Phe Phe Leu Ala Gly		
	515	520
Ser Tyr Thr Lys Gln Asp Tyr Ile Asp Ser Met Glu Gly Ala Thr Leu		
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Ser Gly Arg Gln Ala Ser Ala Tyr Val Cys Asp Ala Gly Glu Lys Leu		
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